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102. Sheila S. Blair, Islamic Inscriptions (Edinburgh, 1998), 320, with further references. Astrolabes show that the two systems of abjad numbering were already in operation in medieval times. A tenth-century astrolabe made in Iraq by Ahmad ibn Khalifl and now in the Bibliothèque Nationale uses the eastern system of alphamericics, whereas an Andalusian example made in 472/1079 in the Germanisches Museum, Nuremberg, uses the Western system. Both are illustrated in D. and J. Sourdel, La Civilisation de l'Islam Classique (Paris, 1968), nos. 393 and 225, respectively.

103. Folio 19th in the Chester Beatty Library, Dublin (ins. 1405), for example, shows verse sixty of Sura 5 (al-Baqara, The Cow) marked with a 4ad.

104. A Spanish provenance has also been suggested (The Qur'ān and Calligraphy: A Selection of Fine Manuscript Material, Bernard Quaritch Catalogue 1313 [London, 1995], 7-11), but is not convincing as it is based mainly on negative evidence.

105. See above, note 31.

106. The only ivory assigned to Fatimid North Africa, for example, is a painted ivory box made for the caliph al-Mu'izz al-Mansuriyya, his capital in North Africa until 973. See The Arts of Islam, exhibition catalogue, Hayward Gallery (London, 1976), no. 145. Its technique, which makes little of the medium's qualities such as translucence and lustre, shows that the Fatimids were producing an unfamiliar item. See further Sheila S. Blair, 'What the Inscriptions Tell us: Text and Message on the Idris from al-Andalus,' Journal of the David Collection 3 [2003]: fig. 5.

107. Gallotian Palace Library, no. 1052; Badr Arabay, Fihrist-i qur'anîhâ-yi khatt-i kitâbhâ-yi saltanatti (Tehran, 1351/1981), no. 110. The fragment was already prized in medieval times, when someone added a colophon on folio 360a in a different ink with the signature of 'Ali ibn Abi Talib.

108. The Maghribi system was also used in other Koran manuscripts made in the region, such as a copy transcribed at Palermo in 372/983-85 [Figure 5.4].


112. Just how early also remains a matter of debate. Dealers are naturally interested in making their wares as early as possible, as in the case of a parchment palimpsest recently published by Sam Fogg, Islamic Calligraphy (London, 2003), no. 1, and attributed to the time of the Fatimid caliphs in the 650s. Textual sources such as al-Nadim, Fihrist, 11, however, tell us that Khalid ibn Abi' l-Hayya was the first to write copies of the Koran, and he worked at the beginning of the eighth century.

Part III: The pre-eminence of Round Scripts in the Early Middle Period
Chapter Five

The Adoption of Round Scripts

Virtually all Koran manuscripts made in the ninth century or earlier were calligraphed in some variant of a rectilinear script. During the tenth and possibly even the eleventh century, copyists continued to transcribe Koran manuscripts in this style, but the major innovation of the middle period was the refinement of round scripts and their transformation from chancery hands into artistic styles suitable for calligraphing the Koran and other prestigious texts. This canonization of round scripts was part of major social changes that produced an international Islamic civilization in which power and culture were decentralized to many courts that used not only Arabic but also Persian.¹

Naming these new round scripts is a problem. The sources give many names for specific scripts, but as François Déroche pointed out, it is still [and perhaps forever will be] impossible to link these with the many manuscripts at hand, especially since most are fragmentary and incompletely catalogued.² To categorize a first group of round scripts, Déroche therefore coined the rubric New 'Abbasid Style or New Style [abbreviated NS] as a complement to his Old or Early 'Abbasid Style, his replacement for kufic. Déroche proposed a summary division of his New Style into two subgroups with numerical headings: NS I, monumental varieties in which the contrast between thick and thin was accentuated, and NS III, which incorporated more fluid lines and more rounded forms.³ Both styles, he hinted, might have been adopted from chancery scripts. Since he was concerned with the relationship of the New Style with what he considered the older angular script used for copying the Koran, he labeled the monumental style NS I, although he noted that it was introduced later than NS III for copying the Koran.⁴

Other scholars have used a plethora of different names for Déroche's NS. Many of the names linked with this distinctive script that has a marked contrast between thick and thin strokes are geographic. The script is often associated with manuscripts transcribed in the eastern Islamic lands, so it is sometimes called eastern kufic, Iranian kufic, Persian kufic, or eastern Persian kufic.⁵ At the same time, other scholars noted that the script was also used in manuscripts copied in the Maghrib, such as the Nurse's Koran made for the
nurse of the Zirid amir al-Mu‘izz ibn Badis in 410/1020 [Figure 5.5], so they also called it Western kufic.6

These geographical names suggest that this distinctive script is derived from kufic, and other names like late or flowering kufic, bent kufic, broken kufic, and semi-kufic make this connection more explicit.7 In Arabic the common name for this script is kufi muhabbah [square kufic] as distinct from kufi muwaddawar (round kufic), the script that had been used in the earliest Koran manuscripts. Some Western scholars also noticed the connection between this distinctive script and the round script used by copyists and chose a combination name. In describing the manuscripts in the Bibliothèque Nationale, Michele Amari, for example, used nashti kufic, a name repeated by Nabia Abbott as kufic-neshhti.8 Another name for this distinctive script, popular with nineteenth-century Orientalists, is Qarmathian or Qarmathian kufic, though the reasons for this choice are not entirely clear.9

Dissatisfied with the connection to kufic, other scholars coined new names for this script that reflected its originality. Eric Schroeder proposed badi‘i (literally, new or marvellous), for the renown copyist Ibn Muqla was reported in later sources to have invented al-khatt al-badi‘.10 Schroeder took this phrase for the name of a new script, but Mojtaha Minovi was quick to point out that it was merely a generic expression for a new style of writing, and Schroeder thereafter retracted his suggestion.11 S. M. Stern called this script rhomboid;12 some Iranian scholars call the script piramuz (or piramuz) identifying it with the script mentioned by the tenth-century chronicler Ibn al-Nadim as invented by the Persians.13 Almost all of these names for this script are based on the assumption that Islamic calligraphy developed linearly from the angular kufic through this distinctive script to a fully rounded one. In other words, by the choice of names, it was tacitly (and sometimes openly) assumed that copyists who had first transcribed Koran manuscripts in kufic gradually switched to this distinctive script with its contrasts between thick and thin before moving to round scripts. Estelle Whelan proposed using a different name – broken kufic – based on a different assumption, namely that this script is an independent stylization from basic rounded handwriting.14 Whelan opted for the name broken kufic as a strictly visual or descriptive one, free from the political connotations implicit in a name such as New ‘Abbasid Style and more evocative than New Style [NS]. The name broken kufic has the further advantage that it clearly indicates the origin of this script in the regular round hand of the chancery scribe.15 I have followed her usage as I believe her reasoning is correct.

This chapter, then, outlines the development of the new round style. From all available evidence, copyists in early Islamic times used a round script for transcribing non-Koranic texts. Déroche calls it a bookish script (écriture livresque).16 This book script was adopted occasionally, if awkwardly, for transcribing the Koran. Copyists gradually stylized it, developing a mannered variant, here called broken kufic.17 Secretaries then transformed this mannered script into a more flowing and elegant round style. The copist Ibn Muqla is generally credited with regularizing broken kufic into a well-proportioned script (al-khatt al-mansub), and his follower Ibn al-Fawwāsh in turn is recognized for adding grace to the round script used for regular transcription.

Round book script

Scribes who penned official letters and correspondence in early Islamic times had used a round script, for it was faster and therefore more efficient than the stately kufic reserved for monumental inscriptions and Koran manuscripts. Legibility was essential for correspondence, and so letters were grouped in words, and important or possibly ambiguous words like proper names were pointed. Copyists in early Islamic times also used a round hand to transcribe codices containing texts other than the Koran. The second oldest dated example to survive on paper is a treatise on unusual terms in the traditions of the Prophet entitled Gharib al-Hadith, dated Dhul-Qa‘da 135/November–December 866 [Figure 5.1].18 The text was composed by the grammarian Abu ‘Ubayd ibn al-Qasim ibn Sallam [d. 838], and this fragmentary medium-sized (28 × 17 cm) copy was transcribed a generation or so after the author’s death. It is written in strong brown ink in black ink in a round calligraphic hand. The copyist wanted to make his hand look more formal than the casual round script used in some correspondence, and so he adopted some of the elaborations used in kufic Koran manuscripts. For example, he tried to adhere to a grid, with angular connectors between letters, though there is no trace of a ruling and the text is written frehand. To underscore the rectilinear aspect, he also extended such letters as sad and kaf and used long extenders, notably in the word qaf, to signal the beginning of a new section of text [Figure 5.1a].

Despite these attempts at regularization and monumentality, the script is clearly rounded. There is a slight bend to alif, which begins with a serif [Arabic calligraphic] on the left and ends in a spur in its final form. The bowls of many letters are rounded, as is the loop in ‘ayn and ha‘. Similarly, the upper strokes of ta‘撩 and kaf have a hook at the top. Initial ‘ayn and final qaf are particularly large, whereas dal has shrunk from the large square form used in kufic Koran manuscripts to a small bar set at a 45° angle to the base stroke.

The renowned Orientalist M. J. de Goeje, who studied the Leiden manuscripts extensively, noted several distinctive features of the orthography.20 The copyist sometimes pointed the letter qaf with two dots above, the standard convention in modern times, but also (and often exclusively) used one dot below. He also put a dot beneath ra‘, al and ta‘ to distinguish them from za‘, dad, and za‘ [Figure 5.1a], and used three dots, sometimes in a straight line, beneath sin to
Figure 5.1 A Page from a copy of Ghair ibn al-Hadith copied, probably at Baghdad, in Dha’l-Qa’da 252/November–December 866.

The manuscript is the second-oldest known work in Arabic copied on paper. It exemplifies the cursive book script used in ’Abbasid times, possibly called warnaqi. As opposed to early Koran manuscripts, the scribe of this one was intent on legibility and therefore carefully pointed letters and spaced words.

distinguish it from shin. Similarly, he put a small ’ayn or ba’ beneath the letter to distinguish it from pointed forms such as ghayn, khā’, or ḫim. Such a technique of distinguishing unpointed letters (muhāmal) from their pointed homographs (muhāmah) is called ḫimal. By pointing the letters, the抄写ist was trying to avoid ambiguities and make the text as readable as possible. For the same reason, he grouped many of his letters by words and broke lines at the end of words. Unlike Koran codices in kufic script that were designed for recitation, this text meant to be read.

The round script used to copy the Leiden manuscript in 252/866 was relatively common in the ninth century for copying non-Koranic texts. Déroche’s list of forty dated Arabic manuscripts transcribed in the ninth century includes fourteen Muslim texts on history, tradition, and the like and twelve Arabic-Christian texts. Several of the latter are preserved in the Monastery of St Catherine at Mt Sinai, including a copy of the Epistles of St Paul and the Acts of the Apostles dated 253/867, a complete copy of the Four Gospels dated 254/867, and the so-called Codex Arabicus, a hagiographic with eighteen miscellaneous treatises on the lives of the saints, the early martyrology, and possibly the oldest Arabic translation of the Book of Job. Datable to the late eighth or early ninth century, this last manuscript is unique in being a palimpsest with five texts (two in Arabic, one in Greek, and two in Syriac), of which the earliest may date back to the fifth century. Despite the wide range in quality, the scripts used for these twenty-six non-Koranic codices shows a remarkably homogeneous style, with the same letter shapes used throughout.

Both Déroche and Whelan characterized the identifying features of this book script, especially when compared to the kufic used for early Koran manuscripts. In this round style there is relatively little spacing between letter groups. Hence the pages look crowded. The strokes vary considerably in thickness, and ascenders on tall letters are diagonal or curving. Final alif has a small vertical spur at the bottom, and a similar loop or hook is added to the ends of other letters, such as the top of alif or lam and the opening of initial ’ayn. Dāl is relatively small in proportion to other letters, especially in relation to the dal in kufic, which is often as large as kaf. Ligatures are angular, as are looped letters. The body of mim and the head of tsaq, for example, are often diamond-shaped. Preceding letters are usually joined to the base stroke of ḫim and its partners. As Whelan pointed out, many of these features are also characteristic of broken cursive, the new style that came to prominence in the tenth century for copying the Koran.

From the ninth century this round script was adopted for transcribing the Koran. The earliest surviving example (Figure 5.2) is a tiny (12 × 9 cm) manuscript copied in vertical (portrait) format on parchment and now dispersed among several collections. A note in Persian on one of the thirty sections (CBL 14177) says that Ahmad
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This early Koran manuscript in round script shares some features with early kufic copies. In addition to the regular system of pointing, the codex in round script is vocalized with the traditional Koranic system of red dots, used, for example, in the Amajur Koran [Figure 4.2]. The copyist also broke lines in the middle of words. On the left page, it is illustrated here, for example, he ended four lines with the initial š of the word that continues on the next line. He did so because he knew that the reader was reciting a text that he had already committed to memory. In doing so, the copyist also created a pattern of curved lines along the left edge of the written area. Sometimes he carried this practice to extremes, even dividing a two-letter word such as innā between the last two lines of the right page.

Several features of format and decoration connect this Koran manuscript in round script with the kufic codices in Whelan's Group 1 [Figure 4.4] and confirm her suggested localization of that set of manuscripts to the eastern Islamic lands. Like those manuscripts, the text in this small copy is divided into verses, each one marked with a gold rosette and each five marked with a gold ḥa'. Chapter divisions, typically giving the name of the next chapter and the verse count, are also written in gold, as is the large palmette extending into the right margin.27

The rubric on the right page of this double page [Figure 5.2] is peculiar and shows the copyist's unfamiliarity with transcribing the Koran. The text in regular, dark-brown ink contains the last word of Surat al-Shu'ara' [26] and the opening verses of Surat al-Naml [27]. The gold rubric, however, contains the verse count of the preceding sura [237 verses]. When writing the chapter division for the previous chapter (folio 11b), the copyist had made a mistake: instead of writing Surat al-Shu'ara' with 237 verses, the copyist had skipped a chapter and erroneously written Surat al-Naml with 95 verses, the name and verse count of the twenty-seventh chapter. When he got to the end of the chapter on this folio, he apparently realized his mistake, and instead of repeating the information in the correct place, he simply gave the verse count of the preceding sura.

The way of writing out the verse count is equally awkward. The copyist apparently started to write out the numbers of the verse count in the unusual sequence beginning with hundreds and working down to decades and units. He seems to have inscribed the first two numbers, two hundred and twenty [miʿatayn waʾ ishrūn], but ran out of room and had to squeeze the last word with the units digit in the margin. By doing so, he took up part of the space for the palmette, which he then had to divide into two wings that encircle the word for the units digit, sab'a [seven]. The script he used for the heading, especially the word 'ishrūn, resembles that used for the heading in the typical Group 1 manuscript [Figure 4.4]. Note, however, the angular bend in the 'ayn, a hint of the stylized broken cursive script that would come to the fore in the tenth century.

That the copyist of CBL 1437 was experimenting with new ways
of transcribing the Koran is clear from another manuscript in this distinctive hand.\textsuperscript{26} It too is written in dark-brown ink on parchment, but in the horizontal [landscape] format. It is also much larger, with folios measuring 13.5 \times 30\,cm, the same size as those in the Amajur Koran \textbf{(Figure 4.2)}. The script, however, is distinct.

Because of the corrector's note in Persian, the manuscript corrected by Ahmad al-Khayyani in 392/915 and its mate in a similar style can be connected with Iran, and contemporary coins, a distinctly conservative medium, show that a round script was accepted for official purposes in Iran and Central Asia at the same time it was adopted for transcribing the Koran. On coins from the eastern Islamic lands, the governor's name, for example, was added in round script to the standard Abbassid coin with angular legends.\textsuperscript{29} Round traits also show up slightly later in monumental inscriptions in Iran.\textsuperscript{30} Iran, however, was not the only place where copyists experimented with round scripts for copying the Koran: a small \textit{bifolio} copied in Mshar in the year 335/946--7 shows that this style was also adopted, perhaps only occasionally, in Egypt.\textsuperscript{31}

These Koran manuscripts copied in round scripts show that the late ninth and early tenth centuries were a time of experimentation in transcribing the scripture. In a few ways these manuscripts are traditional. They are parchment codices, whereas copyists in the ninth century had already begun to adopt paper for non-Koranic texts such as the treatise on Traditions \textbf{(Figure 5.1)}. Like kufic copies of the Koran [e.g., \textbf{Figure 4.2}], these manuscripts are written in dark-brown ink that often degrades or fades. The copyists also broke words between lines, as they did in kufic Koran manuscripts. But these manuscripts in round script also show many new features that distinguish them from the kufic ones discussed in Chapter 4. Their small size suggests that many were personal copies, unlike the larger kufic Korans made for recitation or display in mosques.\textsuperscript{22} These Koran codices in round scripts are also signed by correctors or copyists, at least one of whom gives his genealogy back three generations. In contrast, all of the kufic Korans discussed in Chapter 4 are unsigned; the only names associated with them are those of the patrons who endowed them to pious foundations. As Whelan pointed out, these attributes suggest that Koran manuscripts in round scripts were made in a milieu different from the one[s] where kufic Koran manuscripts were produced.\textsuperscript{23}

Despite copyists' attempts to adapt round scripts into suitable vehicles in which to transcribe God's word, we must conclude that ultimately they were not very successful. Whelan labeled the round script used for CBL 1417 \textbf{(Figure 5.3)} and its mate unattractive.\textsuperscript{25} The lines are wiggly. The spacing is irregular. These copies lack the grandeur of kufic Koran codices and the neatness of later ones in round scripts. Their unappealing appearance may have been one of the reasons that many other copyists chose to transform the regular round script into the new style known as broken cursive, a style especially suited for transcribing beautiful copies of the sacred text and other important works.

\textbf{The canonization of broken cursive}

Broken cursive came to the fore in the tenth century. We know this from two fine manuscripts dated in the third quarter of that century. The first is an autograph copy of Muhammad ibn 'Abd al-Jabar al-Niffari's mystical reflections, \textit{Mawaqif}, dated 344/955--6.\textsuperscript{34} The second is a Koran manuscript \textbf{(Figure 5.3)} penned by Ali ibn Shadhan al-Razi al-Bayyi' in 361/973.\textsuperscript{35} The latter is a landmark in many ways. It was copied on paper and is thus our first surviving copy of the Koran on that material, which had been used at least a century earlier for non-Koranic texts \textbf{(Figure 5.1)}. This Koran codex also includes a double-page frontispiece giving details about recension and verse count. The inclusion of these details reflects the contemporary concern with establishing the correct version of the Koran, and such pages of front matter became common among Koran manuscripts transcribed in the eastern Islamic lands in medieval times.

Several features of the paleography in these two manuscripts in broken cursive are noteworthy, especially when compared to the kufic style used in early Koran manuscripts.\textsuperscript{37} The letters in broken cursive are set closely together, with little space between groups, notably in the Koran manuscript whose text appears crowded in comparison to the spaciousness of the kufic codices. As opposed to the rigidly rectilinear character of the kufic style, broken cursive is markedly diagonal. The bodies, tails, and upper strokes of many letters are pitched at a 45° angle to the ruled baseline, and the bodies of looped letters are triangular. Letters are sometimes connected by a notch or V that descends below the flat baseline. Final \textit{alif} ends in a point, and it and many other ascenders have a small triangular serif added at the top left. Strokes vary in thickness. All in all, broken cursive is heavily stylized: note, for example, the final ya' that bumps backwards under the other letters in \textit{bi' \-huuada} like little wheels on a truck and then extends out into the right margin beyond the third line of the Koranic text \textbf{(Figure 5.3a)}. This is a self-conscious style that represents the efforts of a secretary trying to formalize his regular round script and turn it into a vehicle worthy of Koran manuscripts and fair copies of prestigious texts.

Like Koran manuscripts in round script, manuscripts in broken cursive are often signed, and the copyists' names connect this distinctive script with the eastern Islamic lands and show what kinds of people used it. Al-Niffari (d. 365) was a mystic from Niffar (ancient Nippur) in Iraq who was interested in the mystical symbolism of letters.\textsuperscript{38} Ali ibn Shadhan al-Razi was a copyist and transmitter of hadith whose \textit{nisba} connects him to the city of Rayy in central Iran.\textsuperscript{39} In addition to the Koran manuscript \textbf{(Figure 5.3)}, he also left a copy of al-Sirlah's treatise on the Banat school of grammarians transcribed...
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This manuscript is a landmark in two ways: it is the earliest surviving copy of the Koran transcribed on paper and the earliest surviving copy in broken cursive. The individual letters are angular and markedly diagonal.

sixteen years later in the same distinctive script. Signatures and endowment notices in other Koran manuscripts in broken cursive, several preserved in the shrine library at Mashhad, confirm the connection of this script to the eastern Islamic lands. So do dated codices of other texts.

These manuscripts show that broken cursive was well established by the second half of the tenth century. They are too polished to have been the first ever written in broken cursive, and other evidence shows that this script had been used since the beginning of the century. Traces of this style are already apparent in the brief endowment notes added to Kufic Koran manuscripts from Khurasan’s Group 1. The one added at the top of the recto on folios from the Koran manuscript endorsed by Amurat [Figure 4.2], perhaps penned when the text was repaired in 314/926–7, attempts to imitate the Kufic script used for the text, but shows traces of roundness. At the beginning of the tenth century, copyists of Koran manuscripts were already trying to grapple with the problem of regulating rectilinear and round scripts.

Inscriptions in several other media also document the use of broken cursive in the eastern Islamic lands from the late ninth or early tenth century. One of the most distinctive is ‘tizaz, textiles inscribed with the ruler’s name. ‘Tizaz made of mulham, a type of fabric with silk warps and cotton wefts, was a specialty of the city of Merv (now in Turkmenistan), and inscriptions on pieces woven there in the late ninth century show experiments with various features of broken cursive, such as rising tails, triangular endings to the extenders, and triangular bodies of letters such as medial ‘a’ and ‘ayn. We should not be surprised to find the same script used in ‘tizaz inscriptions and manuscripts, for the texts for ‘tizaz inscriptions were drawn up in the chancery. A similar style of script can also be seen on contemporary ceramics, particularly the slip-painted wares associated with Nishapur in Khurasan and Afrasiyab [old Samarqand] in Transoxiana. Broken cursive was thus not only an official but also a popular script in northeastern Iran in the late ninth and tenth centuries.

Probably adopted first in the east for copying the Koran and other prestigious texts, broken cursive quickly spread throughout the Islamic lands, as attested by a series of codices. The earliest manuscript known from the Maghrib, a copy of Abu Mus‘ab ibn Abi Bakr al-Zahr‘i’s treatise on religious law, al-Mukhtasar, transcribed by Husayn ibn Yusuﬁ for the neo-Umayyad caliph al-Hakam in Sha‘ban 360/June–July 970, is written in broken cursive. More impressive is a dispersed Koran codex [Figure 5.4] transcribed at Palermo in 372/982–3. Like many manuscripts made in the Maghrib, the Palermo Koran is copied on parchment, which remained the favored support there for a longer time than it did in the east. The difference between the hair and flesh sides is clearly visible in this double page, where the ink adheres better to the hair side on the right. The seven lines of text are penned in black ink in scriptio defectiva, in which long alif is often omitted and added in red ink. The letters are not pointed, but some have distinctive shapes. Note particularly the
angular bowl-shaped tails to many letters, especially mim, nun, and waw. Medial fa’ and ‘ayn are diamond-shaped, and final alif ends with a spur or point at the bottom (Figure 5.4a). The upper strokes of ha’ and kaf are diagonal, and letters are connected along a flat baseline with a V or notch. Kaf and sad are elongated and set above the baseline in patterns of parallel bars when incorporated into longer words, as in tannisum, the last word of the seventh line on the left page (Figure 5.4b). The vocalization is distinct as well. Red dots indicate vowels, a yellow dot disjunctive hamza, and blue dots connective hamza. A red semi-circle open at the bottom indicates sukun.

In addition to sura titles in gold, the Palermo Koran has individual verses marked with a gold rosette and groups of five verses with a gold ha’. Both of these markers are well known types, but the gold lozenges quadrangle marking ten verses is more distinctive. Inscribed inside or above it is a small black letter indicating the verse count using the alphabetic (abjad) system followed in the Maghrib and used in the Blue Koran (Figure 4.10). Thus, the quadrangle near the bottom left of the right page of the Palermo Koran (Figure 5.4c) has a 10 to indicate sixty, rather than the 8 used in the eastern system.

The Palermo Koran also has many distinctive marginal markers painted in reserve within polychrome decoration, mainly red and green. These markers indicate not only the standard divisions into sixtieths (azhab) and thirtieths (azza), but also tenths, ninths, sevenths, and fifths. The right-hand page illustrated here, for example, bears a marginal marker saying, somewhat unusually, that this is the first half of the seventh ninth and the beginning of the fifth seventh.

The text of the Palermo Koran is also distinct. It follows the reading of the Madinan Naafi’ (d. 785), traditionally cited as the first of the seven canonical readings of the Koranic text, as transmitted by his student Warsh (d. 813). Warsh’s transmission (riwaya) became standard in the Maghrib in the ninth century. The manuscript reflects a traditional theological position, for the palmette on the frontispiece contains the statement that the Koran is the word of God and was not created (wa la yaya bi-l-makhdug). This was a sharp rebuke to the Mu’tazilites, whose views about the creativeness of the Koran had split the Muslim community in the previous century. Clearly, this controversy still occupied the minds of many in the Western Islamic lands in the tenth century.

Altogether, then, many features—from parchment support to text and frontispiece, script, vocalization, division into various parts, and abjad numbering system—all support the statement given in the signed frontispiece that this manuscript was made in the Maghrib. More importantly, they confirm the multi-pronged approach necessary to localize early Koran manuscripts.

The most famous Koran manuscript transcribed in broken cursive in the Maghrib (Figure 5.5) is the Nurse’s Koran, so-called because two notes in a contracted round hand report that Fatima, the former nurse (al-hadina) of the Zirid prince al-Mu‘izz ibn Badis, endowed it to the Great Mosque of Kairouan in Ramadan 410/January 1020 and added that ‘Ali ibn Ahmad al-wardaq (the bookseller or copyist) wrote (katab), gave (shakala), marked (rasmala), gilded (dhahhaba), and bound (jallala) this Koran manuscript (mashab) for the exalted time under the supervision of Dura, the female secretary (al-katiba). The text is copied in brown ink on very large (45 x 30 cm) parchment folios in a vertical format with five lines of broken cursive per page. The text is not pointed, but vowels are marked in red, sukun and shadda in blue, and hamza and madda in light green.

The broken cursive used for the Nurse’s Koran is remarkable for its
mannerism. Note, for example, the extreme contrast between the thick strokes of most letters and the thin ones used for tails and descendents. This contrast is particularly striking in final zaw, used twice in the bottom line of the right page and twice at the end of the second and fourth lines of the left page. The round bowl of glag has been transformed into a diagonal hair connected at right angles to a thick blade so that the letter looks like a hockey stick or an upsidedown pennant. Other pages show equally stylized features. The tail of final ya', for example, sometimes reverses back under the word with bumps, the same kind of final ya' that 'Ali ibn Shaddad had used in his copy of the Koran transcribed some fifty years earlier (Figure 5.3a).54

In the Maghribi broken cursive was not limited to Koran manuscripts, but used also for Arab-Christian manuscripts, such as a bilingual Greek-Arab copy of the Gospels that once belonged to the Church of the Holy Sepulchre in Jerusalem.55 Nevertheless, its use was sporadic, and the style was particularly popular in Iran and the eastern Islamic lands, to judge from the many surviving copies of the Koran and other texts transcribed there. Colophons in Koran manuscripts mention such cities as Isfahan56 and Rayy.57 In other cases, the copyist's nisba connects the manuscript to Iran and the east. Such nisbas include al-Saffar,58 al-Rudhbari,59 and al-Balkhi.60

Broken cursive was used in Iran and adjacent areas during this period for a series of Koran manuscripts. The typical copy is medium-sized, on the order of 30 × 17 cm, with a compact script and many lines per page (up to twenty-five). Verses are separated by gold rosettes, groups of five are marked with a large ba', the alphanumerical lexical number for five, and groups of ten with a gold circle, with roundels in the margin reiterating this last piece of information. Surah titles are given in gold or white on gold, typically with a palmette extending into the margin. The basmala is often decorated and extended, and knotted or interlaced letters are also typical. Al-Rudhbari, for example, transformed the typical diamond-shaped mim in al-tauham into a knot and braided the horizontal strokes of the ta' in the heading for Surah Ta-Ha (102).61

These Koran manuscripts in broken cursive share several textual features with the one copied by 'Ali ibn Shaddad al-Razi al-Bayri in 361/972 (Figure 5.3). Most of them use the new system of orthography and vocalization. The round large dots used in kufic Korans were reduced in size or eliminated, and new markings introduced such as strokes for fa'ah and kasra, waw for damma, and a circle for sukun. This is the system still used today. Most of these small Koran manuscripts also have extra illuminated pages detailing the particular reading of the Koran they contain and the number of verses in the text. Both the small size and the detailed markings and numberings show that these Koran codices in broken cursive were intended for a different audience than the large-format ones in kufic: personal reading and study rather than oral recitation by scholars who had already committed the text to memory.

broken cursive and Ibn Muqla

The style of broken cursive used in these copies of the Koran and other texts is often associated with the star calligrapher Abu 'Ali Muhammad ibn 'Ali, known as Ibn Muqla.62 Born in Baghdad in 885, he became a secretary in the Abbasid administration and served three times between 932 and 936. With the economic and financial crisis under the caliph al-Radi (r. 934-40), Ibn Muqla was deposed, his possessions confiscated, and his hand amputated. He fled, neglected, in prison on 10 Shawwal 332/30 July 940.

Despite his ignominious end, Ibn Muqla was revered for his calligraphy. The chronicler Ibn al-Nadim, writing some fifty years after Ibn Muqla's death, mentions him several times in the Fihrist. The best known occurs in the opening chapter on language and calligraphy.63 There, Ibn al-Nadim lists Ibn Muqla as one of three viziers and secretaries in office in the early tenth century who wrote in black ink (nisdal). Ibn al-Nadim continues that Muhammad's brother Hasan wrote in brown ink (hibr), adding that the like of these two brothers had not been known in the past or even as late as his own time (the late tenth century). Ibn al-Nadim also notes that both wrote according to the calligraphy of their grandfather Muqla, whose real name was 'Ali ibn al-Hasan ibn 'Abdallah. Later in the section on government officials who wrote books, Ibn al-Nadim adds that he had read something written in Ibn Muqla's hand. Ibn al-Nadim transcribed the four-page account according to the order and wording used by the author and included it in his treatise.64 By the end of the tenth century when Ibn al-Nadim was writing, it seems that Ibn Muqla's distinctive hand was already recognizable.65

We get more secure information about Ibn Muqla and his hand from the small treatise on calligraphy by the philosopher, man of letters, and professional copyist, Abu Hayyan al-Tawhidi (d. 1023), who wrote a generation after Ibn al-Nadim.66 Abu Hayyan reports that he had attended a salon crowded with copyists and penmen, each of whom revealed his own secret advice about calligraphy. Abu Hayyan's short treatise contains ninety-five such pieces of advice, all presumably heard first-hand by the author.

Abu Hayyan opens with four different authorities describing the red pen (qalam). The first three are anonymous; the fourth is Ibn Muqla, who is described as the noble vizier and expert penman/sec- retary (kathib). Ibn Muqla's advice is to lengthen the nib (nifs), make it good, and trim the point obliquely to the right, for the point deter- mines the handwriting. His advice is generic, and it is anachronistic to imagine that these texts will serve as how-to manuals explaining the art of calligraphy to outsiders.
The metaphorical nature of the written sources is confirmed by the next passage describing what an expert penman should do. Abu Hayyan does not specify whether this long passage also records the words of Ibn Muqla, but since all other reports begin by citing the authority and since no new authority is mentioned here, we can logically ascribe it to him. According to the heading, a penman needs seven things, though the passage actually enumerates ten qualifications of good handwriting, each designated by a rhyming verbal noun (masdar), which is then explained. The ten basic principles of writing are: [1] plain through tahiq [precision], thereby giving the individual letters distinct shapes; [2] tahiq [making eyeballs], leaving space in the middle of round letters; [3] tawiq [encircling], rounding the front, middle and tail of vow, fa', and similar letters; [4] takqiq [piercing], keeping the loops of ha', yun and similar letters open; [5] ta'iq [causing to take root]; distillation, lengthening final min, ya', and similar letters in such words as min or fi as if spun on a single loop; [6] tasqiq [splitting], enveloping [perhaps elongating] sad, kaf, and ha' for proportion and equilibrium; [7] tanmiq [embellishing], writing all letters neatly; [8] tawiq [arranging suitably], keeping the lines straight; [9] tawiq [exactness], making the tails of the letters with broad flowing strokes written with the edge of thereed pen; and [10] tafriq [division], keeping the letters separate so that they do not enroach upon each other. The characterstics define a balanced rounded script with open letters and extended tails written with the edge of the pen.

Abu Hayyan mentions Ibn Muqla three other times in his short treatise. All three references underscore the vizier's calligraphic skills. In section 15, for example, the secretary Abu 'Abd al-Salam al-Zanjij reports that the best handwriting was the one used by his colleague in Iran. When Abu Hayyan inquired about Ibn Muqla's handwriting, al-Zanjij replied that Ibn Muqla was a prophet in the field of handwriting, it was poured upon his hand, even as it was revealed to the bees to make their honey cells hexagonal. In this passage al-Zanjij is referring to Koran 16:68, in which God is said to have taught the secrets of nature, such as showing the bee how to build its hive.

Within a century of his death, then, Ibn Muqla was famed for his distinctive hand. His reputation only increased in later times. The thirteenth-century biographer Ibn Khalilikan, for example, credits Ibn Muqla with the new writing or the writing of present times, and the seventeenth-century encyclopaedist Hajji Khalilai calls this writing al-khatt al-badi' [the marvellous script]. Since later sources were round, later scholars wrongly inferred that Ibn Muqla had invented round scripts.

This new style was later canonized as al-khatt al-mansub, as expression that Nabia Abbott took to mean proportioned writing. Using later authors as a guide, notably al-Qalqashandi (d. 1481), secretary in the Mamluk chancery and author of the voluminous encyclopaedia entitled Subh al-a'sha [Dawn for the Night-blind], and the anonymous Ibn 'Abd al-Salam, she worked out a system starting with a diamond-shaped point made by the pen when pressed heavily on the paper. The length of the sides of the rhombus depended on the width of the nib. Several dots placed vertex to vertex determined the height of the alif. All other letters were then related [masaha] to this basic measure. As she noted, later sources spelled out the basic idea for the system, but not the exact proportion. The letter ba', for example, is made of two strokes, one vertical, the other horizontal. The sum of the two is equal to the height of the alif, but the sources do not tell us is the ratio of horizontal to vertical, which could vary from 1:1 to 1:1.5.

By choosing one of several possibilities, Abbott reconstructed a hypothetical model for the proportioned script (Figure 5.6). It is essential to remember, however, that her model is based on much later sources [al-Qalqashandi, for example, was writing some five hundred years after Ibn Muqla] and is based on a series of personal choices. At in any one of those choices results in an error that distorts the whole schema.

If it is impossible to identify Ibn Muqla's hand from literary descriptions, it is only slightly less difficult to do so from surviving specimens. Like any hero, Ibn Muqla was idolized and his name added to multiple works. Many libraries contain pages or manuscripts with later marginal inscriptions attributing the transcription to Ibn Muqla. Even if not all are authentic, at least they give an idea of what people in medieval times (and later) thought Ibn Muqla's hand looked like. One example [Figure 5.7] is a tiny 12 X 9 cm vertical-format Koran manuscript in the Raza Library in Rampur with twenty-three lines of broken cursive on each of the 225 vertical folios. Most of the large rectangular boxes contain chapter headings, but the two damaged ones on the bottom left are missing one of the two lines of script contain the colophon, written in a different hand than the rest of the text. The script, as with other pages attributed to Ibn Muqla, is a good example of broken cursive. Letters are set closely together on a flat baseline, occasionally with a notch or V between connected letters. The elongated bodies of sad, kaf, and ha' emphasize the horizontality. This is countered by the straight vertical line of alif, which has a short downstroke or spur at the bottom in final position. The tails of final min, ra', and similar letters are large and sweeping. Initial yun is large and open. Final ya' can turn backwards under the preceding word with
bumps under the other letters, as in the word *sayasa* from Sura 111 on the bottom left [Figure 5.7a]. This is the same mannerism used in the Koran manuscript penned by Ali ibn Shadhan [Figure 5.3a] and the one made for the Zirid nurse. Some letters have small serifs on the left.

The crisp, well-defined letters in the broken cursive assigned to Ibn Muqila enhance its legibility, a clear requisite for someone trained in the chancery. Features such as the consistent orthography and vocalization and the introductory pages with recension and verse counts also fit the chancery tradition of record-keeping. This script is clearly rooted in the round book script used since the ninth century [Figure 5.1]. By the tenth century secretaries had elevated it into a well-proportioned and smooth script worthy of transcribing God’s word.

The standardization of round scripts under Ibn al-Bawwab

The style of broken cursive canonized by Ibn Muqila and his circle at the beginning of the tenth century was a stiff and mannered script. Common until the thirteenth century, it became increasingly attenuated and stylized (see Chapter 6) and was soon joined and eventually supplanted by more free-flowing styles of round script. Just as the canonization of broken cursive was later associated with one historical figure, so the transformation of round script into one worthy of transcribing the scripture was later associated with a single person—Abu‘l-Hasan ‘Ali ibn Hilal, known occasionally as Ibn al-Siri and more commonly as Ibn al-Bawwab. D. S. Rice collected the few details given by later chroniclers about Ibn al-Bawwab’s life. As his penname literally suggests, he was the son of a doorkeeper. He worked first as a house decorator (*muzawwiq yusawwir al-dur*), then

...
To remove all trace of crumpling and soiling.
Then, make patient imitation your habit.
Only a patient person achieves what he desires.
Begin by writing on a wooden slate, wearing it out
With a resolution kept firm from haste.
Do not be ashamed of your bad writing.
When you begin to imitate [the letters] and draw lines.
The matter is difficult [at the beginning], and then becomes easy.
Many a thing that is difficult [at the beginning] turns out later on
to be easy.
Eventually, when you have achieved what you have hoped for,
You will be filled with joy and gladness.
Then, thank God and do His pleasure!
God loves all those who are grateful.
Furthermore, pray that the fingers of your hand will write
Only what is good for you to leave behind in the house of deception.
Everything a man does, he will be confronted with on the morrow.
When he is confronted with the written decrees [on the Day of
Resurrection].

Somewhat generalized and couched in metaphors, Ibn al-Bawwab’s
poem could never be used to learn how to write like Ibn al-Bawwab
did. Nevertheless, it tells us a few things about calligraphy in his
time. Like his predecessor Ibn Muqla, Ibn al-Bawwab gives prece-

dence to the correct procedure for nibbling the reed pen, but Ibn
Bawwah favors a different cut. Ibn Muqla advised that the point be
trimmed obliquely to the right, but Ibn al-Bawwah advocates a sym-
metrical nib with something between a slanted and a rounded edge.
Ibn al-Bawwah’s poem also assumes that copyists wrote with a black
soot-based ink on paper, supporting the paper on a wooden board.
Ibn al-Bawwah’s reputation has attracted attributions just like his
predecessor Ibn Muqla’s did. Six manuscripts have colophons naming
Ibn al-Bawwah. The most famous is the Koran codex in the Chester
Beatty Library, whose long and full colophon reports that ‘Ali ibn Hilal
transcribed this complete copy [juanit] at Baghdad in 391/1000-1.
Now trimmed, the 288 folios of polished brownish paper originally
measure some 19 × 14 cm. Each page [Figure 5.8] contains fifteen
lines of round script posed firmly on a straight baseline with no sign of
ruling. The text is written in the scriptio plena and fully vocalized,
with vowels and consonants written throughout in the same ink.
Unpointed [muhaqqa] letters – ha’, sad and ‘ayn – are almost always
distinguished by small versions of the same letters written below, as
and ra’ are marked by an inverted circumflex above. Even though the
script is about twice the size of that used in the copy attributed to Ibn
Muqla [the alif here measures about .6 cm, whereas it is .3 cm in the
Rampur manuscript], this codex has a denser aspect, as words and lines
are packed more closely together.79

Despite its compactness, the text is eminently readable because of

Figure 5.8 Page containing verses 53:1-3 from a Koran manuscript with fifteen lines per page signed by
This manuscript is generally reckoned to be the only authentic copy of the Koran penned by the renowned
calligrapher Ibn al-Bawwah. It shows his new style of round script, remarkable for its clarity, neatness, and
flow despite its modest size. This text script is juxtaposed to a more curvaceous one, used here as display
script for the chapter heading. Other incidentals are added in a third script, broken cursive.
the flowing hand. Letters are pitched just to the left of vertical, and individual words and letters like kaf typically slope downward from right to left, a movement echoed in the pairs of dots, which are written on the same right-to-left downward slope. The slope imparts a forward moment to the script, a flow that is enhanced by the strong sublinear rhythm created by the long swooping tails of final nun, yaa, and similar letters, which extend beneath the next word and sometimes encircle other descending tails before tapering to a point (Figure 5.8a). The script swells and contracts. To make a musical analogy, the broken cursive attributed to Ibn Muqla is staccato, Ibn al-Bawwab’s round hand is legato.

The sense of flowing movement engendered by the sloping strokes and sweeping tails is enhanced by the long sweeping stroke near the beginning of the basmala at the opening of most chapters (Figure 5.8a). At least since the ninth century, copyists writing round scripts on paper had used long extenders to visually demarcate the beginning of a new section of text, as with the word qala in the copy of the Gharib al-Hadith (Figure 5.1). This long stroke takes advantage of the inherent smoothness of the support and displays the copyist’s virtuosity in pushing pen across page without wavering. From the late tenth century, copyists transcribing Koran manuscripts in broken cursive or near cursive, an action that confirms the origins of broken cursive in round scripts. Copyists typically lengthened the basmala to fill out the first line of text by inserting a long connector between the ha’s and the mim of al-rahman. The extender therefore sits in the middle of the line. Ibn al-Bawwab’s copy marks a change, for he lengthened the connector between sin and mim in bismi, near the beginning of the line. Like a paragraph marker, the swinging stroke alerts the reader to a new section and then draws the eye across the page. This asymmetrical extender in the basmala becomes part-and-parcel of manuscripts and documents written in round script for centuries to come (e.g., Figures 6.13, 7.1, 8.1, 9.2, 10.3, 11.2, 12.2 and 13.2]. Manuscripts in maghribi script (e.g., Figures 6.16, 9.12, and 12.13], in contrast, continue to use the centered extender, a mannerism that suggests the origin of that style in copyists’ broken cursive.

When transcribing the text, Ibn al-Bawwab left no spaces between individual clusters of three blue dots set in a triangle to mark the end of a single verse. But he did leave spaces at the end of every five and ten verses, later filling these spaces with the standard gold markers (ha’ for five verses, a gold circle for ten). He inscribed the gold circle with a letter whose abjad value corresponded to the appropriate decade, and added a larger roundel in the margin that repeats the information with the decade written out in words. At the top of the first page (Figure 5.8), for example, a gold ha’ on the first line marks the fifty-fifth verse of Sura 53, a gold circle with sin (in an alphanumerical for sixty in the eastern system) marks the sixtieth verse, which is further signaled by the large roundel in the margin with the word sittun (sixty) written out in words in broken cursive.

This system of gold markers too becomes the standard in later manuscripts (e.g., Figure 7.1]. Larger roundels in the margin marked places of prostration, as here where the larger roundel with an interlaced star is inscribed salat [prostration] in the same script. Along with the round script of the text and the broken cursive of the marks, Ibn al-Bawwab used a larger round script for display purposes such as double-page frontispieces, as on this page (Figure 5.9) saying that this manuscript follows the verse count of the Kufans on the authority of ‘Ali ibn Abi Talib. Chapter headings, like the one marking the beginning of Chapter 54, Surat al-Qamar (Figure 5.8), are written in a similar script but in two colors of gold ink, with yellow gold used for the words and coppery gold used for vocalization and diacritical marks. Ibn al-Bawwab deliberately distinguished this information, which is not part of the revelation, not only by size and script but also by color, outlining white letters with gold and gold letters with black or white.

Ibn al-Bawwab’s display script (Figure 5.9) is distinguished by its curves. Descending tails of nun and similar letters are rounded and often impinge upon the next word. Af is almost triangular, with a thick top that is beveled or furnished with a small hook to the right. As the bottom it has a hook to the left that sometimes connects to the next word. Final ha’ is usually an angular squiggle that is open at the bottom. Dal is relatively large, as in the word muhammad in the compartment in the middle right. Ra’, waw, and final mim often, though not always, end with a small upward hook, as at the end of al-qamar, the second word in the sara heading (Figure 5.8).

In addition to the elegant and legible text and display scripts, Ibn al-Bawwab’s Koran manuscripts is notable for its fine illumination. Text pages are decorated in the traditional blue, gold, and sepia, and the opening and closing pages include decoration in brown, white, and red as well. The illuminations are clearly done by the same hand that penned the manuscript, for the contour lines around the marginal palmettes marking the sara headings are drawn with a reed pen, not with brush used for the rest of the decoration. Furthermore, in two places the illuminator drew the contours not with the standard blue pigment, but with the brown-black ink used for the text. Such a mistake could have occurred only if copyist and illuminator were the same person. This diversity of talent was not unique to Ibn al-Bawwab, and many other copyists of his time were also illuminators.

Identifying the round scripts that Ibn al-Bawwab used to transcribe this Koran codex is a complex problem. The scripts are not labeled, and textual sources say only that the calligrapher was a master of manuscrits. Rice designated the text script naskh and the display script thuluth, and many modern scholars have followed suit. This pair of small and large scripts are the most common of the round scripts later grouped as the Six Pens. Naskh [literally, copying], as its name suggests, was used to transcribe a variety of texts and became the calligraphic norm for transcribing ordinary books and small